Attorney's Docket No. MEMC 98-5750 (2358)

DECLARATION AND POWER OF ATTORNEY

REGULAR OR DESIGN APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING GROWTH OF A SILICON CRYSTAL TO MINIMIZE GROWTH RATE AND DIAMETER DEVIATIONS

the specification of which:

(check one)

-	is attached hereto] was filed on	as Application Serial No.
	, and was amended	d on
[] was described and claimed	in PCT International Application
	No, filed on	n and as amended
	under PCT Article 19 on	, if any.

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations §1.56.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a) - (d) or §365(b) of any foreign application for patent or inventor's certificate, or §365(a) of any PCT application which designates at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

	Priority Claime	<u>ed</u>
(Number)	(Country)	(Day/Month/Year filed)
(Number)	(Country)	(Day/Month/Year Filed)
(Number)	(Country)	(Day/Month/Year Filed)
	Priority Not Cla	aimed
PRIORITY IS CLAIME (Number)	COuntry)	(Day/Month/Year Filed)
CLAIM FO	OR BENEFIT OF PROVISION	NAL APPLICATION(S)
-		35, United States Code, l application(s) listed
(Application N	umber)	(Filing Date)
(Application N	umber)	(Filing Date)

CLAIM FOR BENEFIT OF EARLIER U.S. APPLICATION(S) UNDER 35 U.S.C. 120

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

(Serial No.)	(Filing Date)	(Status)	
(Serial No.)	(Filing Date)	(Status)	

POWER OF ATTORNEY

I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Irving Powers (15,700), Donald G. Leavitt (17,626), John K. Roedel, Jr. (25,914), Michael E. Godar (28,416), Edward J. Hejlek (31,525), William E. Lahey (26,757), Richard G. Heywood (18,224), Frank R. Agovino (27,416), Kurt F. James (33,716), G. Harley Blosser (33,650), Paul I. J. Fleischut (35,513), Vincent M. Keil (36,838), Robert M. Evans, Jr. (36,794), Robert M. Bain (36,736), Joseph A. Schaper (30,493), Kathleen M. Petrillo (35,076), David E. Crawford, Jr. (38,118), Paul A. Maddock (37,877), Scott A. Williams (39,876), Richard L. Bridge (40,529), David M. Gryte (41,809), Christopher M. Goff (41,785), James E. Butler (40,931), Derick E. Allen (43,468), Matthew L. Cutler (43,574), Michael G. Munsell (43,820), Robert J. Lewis (27,210), Patrick S. Eagleman (P-44,665), Karen Y. Hui (P-44,785), and Anthony R. Kinney (P-44,834), all of the law firm of SENNIGER, POWERS, LEAVITT & ROEDEL, One Metropolitan Square, 16th Floor, St. Louis, Missouri 63102.

Send Correspondence To:	Direct Telephone Calls To:
Customer Number: 000321	Robert M. Bain (314) 231-5400
knowledge are true and that belief are believed to be t were made with the knowledg like so made are punishable Section 1001 of Title 18 of	statements made herein of my own all statements made on information and true; and further that these statements ge that willful false statements and the by fine or imprisonment, or both, under the United States Code and that such any jeopardize the validity of the issued thereon.
Full name of sole or first	inventorPaolo Mutti
Inventor's signature	26 Kulh Date 24/1/3000
Residence <u>Merano</u> , <u>Italy</u>	Citizenship <u>Italy</u>
Post Office address <u>MEMC El</u> P.O. Box 8, St. Peters, Mis	ectronic Materials, Inc., 501 Pearl Dr.
Full name of second joint i	nventor <u>Vladmir V. Voronknov</u>
Inventor's signature	pate 29/1/200
Residence <u>Merano, Italy</u>	CitizenshipRussia
Post Office address <u>MEMC El</u> P.O. Box 8, St. Peters, Mis	ectronic Materials, Inc., 501 Pearl Dr.

<u>ASSIGNMENT</u>

WHEREAS, We Paolo Mutti of Merano, Italy, and Vladimir V. Voronkov of Merano, Italy, have invented an improvement in METHOD FOR CONTROLLING GROWTH OF A SILICON CRYSTAL TO MINIMIZE GROWTH RATE AND DIAMETER DEVIATIONS (File MEMC 98-5750 (2358)) and have executed an application for a United States patent based thereon simultaneously herewith;

AND, WHEREAS, MEMC Electronic Materials, Inc. of St. Peters, Missouri, a corporation of the State of Delaware (hereinafter referred to as "ASSIGNEE") is desirous of acquiring certain rights thereunder;

NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said United States application, any other United States applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said United States application or in whole or in part on said invention, any foreign applications based in whole or in part on any of the aforesaid United States application or in whole or in part on said invention, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said invention or any part thereof;

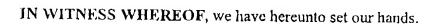
SPLR

TO BE HELD AND ENJOYED by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us had no sale and assignment of said interest been made;

AND We hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said ASSIGNEE;

AND We hereby jointly and severally agree for ourselves and for our respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

AND We hereby jointly and severally covenant for ourselves and our respective legal representatives that we have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed our right, title and interest in said invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.



Paolo Mutti

Rodo Callorto Witness

Witness Hipport

HERALD 24/1/2000

Meraus 24/1/2000

Merone 14/1/3000

Vladimir V. Voronkov

Rock Collarate
Witness

Witness History

Menno 24 1/2000
Date

Mercus, 24/1/200

Marin 24/1/2000



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UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER MEMC 2358
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MARCH 12, 2001

PTAS

SENNIGER, POWERS, LEAVITT & ROEDEL ROBERT M. BAIN ONE METROPOLITAN SQUARE 16TH FLOOR ST. LOUIS, MO 63102



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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/01/2000

REEL/FRAME: 011380/0967

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BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

MUTTI, PAOLO

DOC DATE: 01/24/2000

ASSIGNOR:

VORONKOV, VLADIMIR V.

DOC DATE: 01/24/2000

ASSIGNEE:

MFMC ELECTRONIC MATERIALS, INC.

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PATENT NUMBER:

ST. PETERS, MISSOURI 63376

SERIAL NUMBER: 09495563

FILING DATE: 02/01/2000

ISSUE DATE:

SEDLEY PYNE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



	03-09-2001	
MRD 00 R		EET
To the Honorable Commissioner of Paten	101606219 its and Trademarks: Please record the attach	ed original document(s) or copy thereo(
1 Name of conveying party(ics) (assignor(s)):		
Poolo MUTTI and Vladinur V. VORONKOV		
Additional name(s) of conveying party(ies) attached? 2 Name and Address of Party(ies) receiving an interest (as:		
Name. MFMC Electrome Materials, Inc. Address: 50) Pearl Drive P O Box 8		
City: St. Peters		
State, 1915(1)(1) 2.1[3. (13376		
Additional name(s) & address(es) attached? ves 3. Nature of Conveyance:		
M Assignment	□ Change of Name	
☐ Verified Translation ☐ Security Agree	ement Other	
Execution Date: January 24, 2000		
4. Application number(s) or patent number(s): 09/	495563	
If this document is being filed together with a new applie	cation, the execution date(s) of the application	n is: <u>January 24, 2000</u>
A. Patent Application No(s).	B. Patent No(s).	1
Others o	on additional sheet(s) attached? Yes	3 No
 Name and address of party to whom currespondence concerning document should be mailed: 	6. Total number of application Application(s) 1 + P	ons and patents involved: atent(s) = Total1
Robert M. Bain	7. Total Fee (37 CFR 3.41)	\$ 40.00
Senniger, Powers, Leavitt & Roedel	Enclosed	-
One Metropolitan Square 16th Floor	☐ Authorized to be char	ged to deposit account
St. Louis, Missouri 63102 (314) 231-5400 (telephone)	8. Deposit Account Number (Duplicate copy of this	
	· · · · · · · · · · · · · · · · · · ·	ent or credit any averpayment to
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9. Statement and signature		
To the best of my knowledge and belief, the foregoing info	ormation is the and correct and any attached	copy is a true copy of the original document.
Robert M. Bain	一位とから	February 1, 2000
Name of Person Signing	Signature	Date
	-	p. m. to